The Hawaii-based Longline Logbook Summary Report July-September 2006¹

Fisheries Monitoring and Analysis Program
Pacific Islands Fisheries Science Center

All Federal longline logbook data for trips completed in the third quarter of 2006 by Hawaii-based longline vessels have been received and processed and are summarized in this report (Table 1). The report includes most data from trips that began late in the third quarter and continued into the fourth quarter, but data from such trips may still be forthcoming; hence, this report should be considered preliminary.

The shallow-set fishery targeting swordfish was inactive during the third quarter. It was closed on March 20, 2006 for the remainder of the year because it had reached its designated 2006 annual limit of 17 interactions with loggerhead sea turtles. However, the deep-set longline fishery for tunas continued to operate during the third quarter.

A total of 117 vessels were active in the fishery during the third quarter of 2006, 5 more than in the same period of 2005 (Fig. 1). There were 339 longline trips, 44 fewer than in the third quarter of 2005. All trips in the third quarter were deep-set tuna-targeted trips (Fig. 2). A total of 8.1 million hooks were set during the quarter, almost the same number as were set in the third quarter of 2005 (Fig. 3). The largest proportion of hooks was set outside of the U.S. EEZ (68%) followed by waters within the main Hawaiian Islands (MHI) Exclusive Economic Zone (EEZ) (23%). Other effort was recorded in the EEZ of the Northwestern Hawaiian Islands (NWHI) EEZ (2%) and other U.S. possessions (7%).

In the third quarter of 2006 the bigeye tuna catch was 17,431 fish (Fig. 4); 77% were caught outside the U.S. EEZ and 13% in the MHI EEZ. The bigeye tuna CPUE on tuna-targeted trips was 2.1 fish per 1,000 hooks (Fig. 5). The albacore catch (2,518 fish) and CPUE (0.3 fish per 1,000 hooks) more than doubled in the third quarter of 2006 compared to the same period of 2005 (Figs. 6-7). The yellowfin tuna catch (5,526 fish) and CPUE (0.7 fish per 1,000 hooks) in the third quarter of 2006 also were higher than in the same quarter of 2005 (Figs. 8-9).

The third quarter 2006 swordfish catch (579 fish) decreased 50% from the same period in 2005, at least partly because the shallow-set fishery targeting this species was closed (Fig. 10). Swordfish CPUE on tuna-target trips was only 0.1 fish per 1,000 hooks (Fig. 11). The third quarter striped marlin catch (4,838 fish) and CPUE (0.6 fish per 1,000 hooks) tripled in comparison to the same period of 2005 (Figs. 12-13). The blue marlin catch and CPUE were 1,587 and 0.2 fish per 1,000 hooks, respectively (Figs. 14-15).

A total of 13,683 sharks were caught in the third quarter of 2006, of which 3% (442) were kept by the vessels. Blue shark comprised 88% of the total shark catch (12,050 fish) (Fig. 16). Blue shark CPUE on tuna-target trips was 1.48 fish per 1,000 hooks (Fig. 17).

Annual summary statistics for Hawaii longline fishing effort and catch during the years 1991-2005 are shown in Figs. A1-A7.

¹PIFSC Data Report DR-06-008 Issued 29 November 2006

Table 1.--Western Pacific longline logbook summary Statistics for July-September 2006, based on date of haul. Data are for vessels landing or based in Hawaii. Gear type: all gear; Area of operations: all fishing areas.

	Trip inform	nation	
Number of vessels Number of trips Number of sets Number of hooks set Number of light sticks used	8,12	0	
Species catch information			
Species class Species	# kept 	# caught	# caught per 1000 hooks
Pelagic Management Unit Specie			
Billfish Blue Marlin Spearfish Striped Marlin Swordfish Other	1,574 1,448	1,587 1,455 4,838 579 128	0.20 0.18 0.60 0.07 0.02
Total	8,417	8,587	1.06
Sharks Blue Mako Thresher Other	104 245 76 17	12,050 451 593 589	1.48 0.06 0.07 0.07
Total	442	13,683	1.68
Tuna Albacore Bigeye Bluefin Skipjack Yellowfin Other	2,502 17,261 4 2,043 5,381	2,518 17,431 4 2,183 5,526	0.31 2.14 0.00 0.27 0.68 0.00
Total	27,192	27,663	3.40
Other PMUS Mahimahi Moonfish Oilfish Pomfret Wahoo	12,771 5,245 3,627 8,336 3,421	12,905 5,267 3,671 8,413 3,437	1.59 0.65 0.45 1.04 0.42
Total	33,400	33,693	4.15
Miscellaneous			
Non-PMUS	461	1,525	0.19
Date and time of summary:	11/15/06 (14:06:43)		

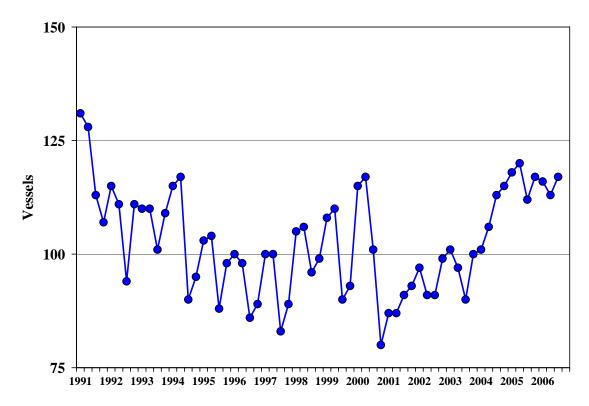


Figure 1.—Active Hawaii-based longline vessels, 1991-2006.

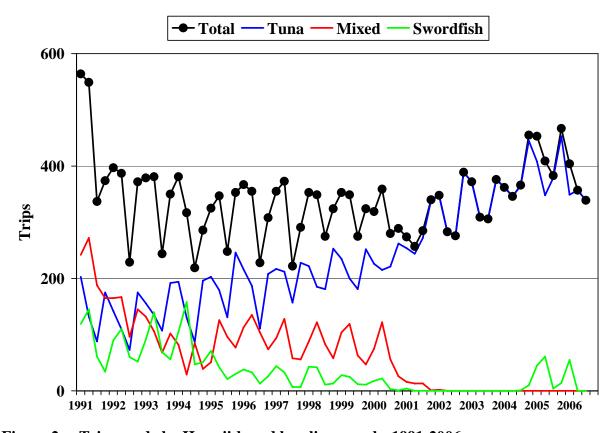


Figure 2.—Trips made by Hawaii-based longline vessels, 1991-2006.

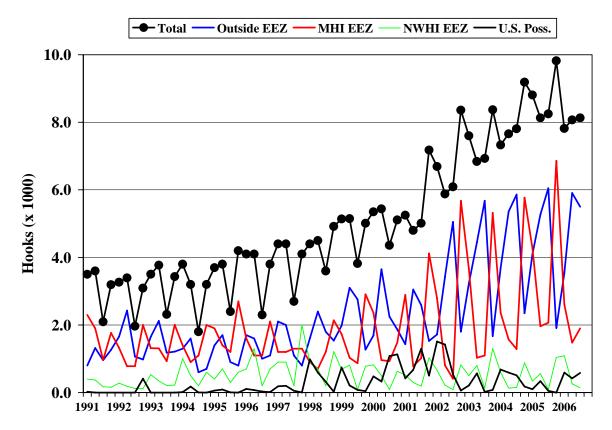


Figure 3.—Hooks set by the Hawaii-based longline fishery by quarter, 1991-2006.

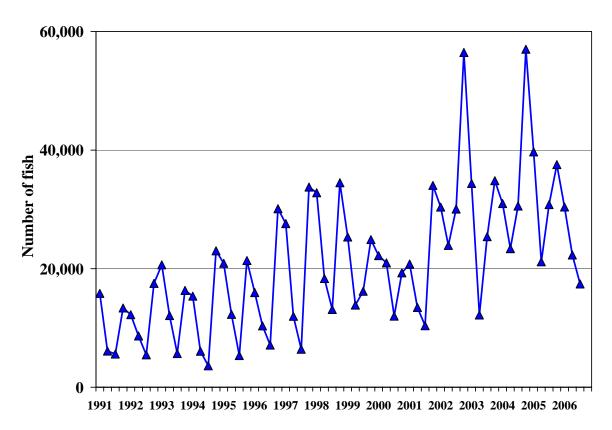


Figure 4.—Hawaii-based longline catch of bigeye tuna by quarter, 1991-2006.

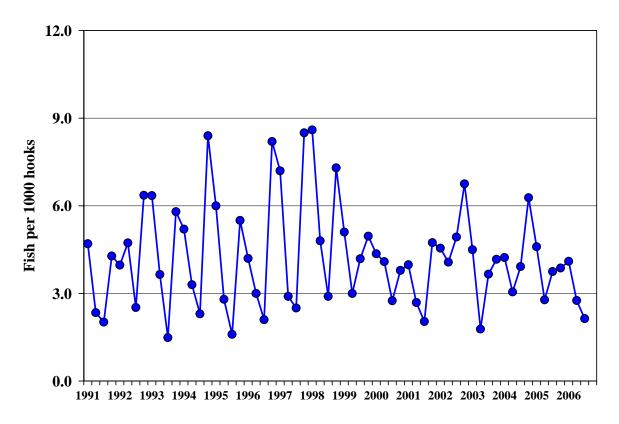


Figure 5.—Bigeye tuna CPUE for tuna-targeted trips by quarter, 1991-2006.

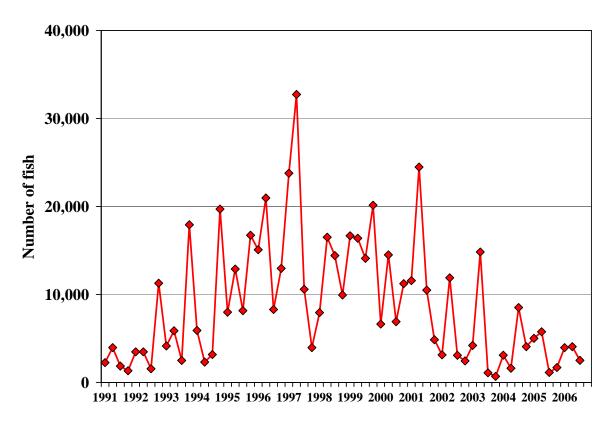


Figure 6.—Hawaii-based longline catch of albacore by quarter, 1991-2006.

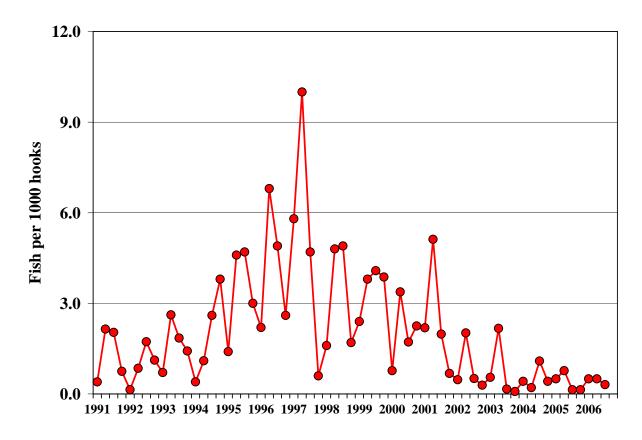


Figure 7.—Albacore CPUE for tuna-targeted trips by quarter, 1991-2006.

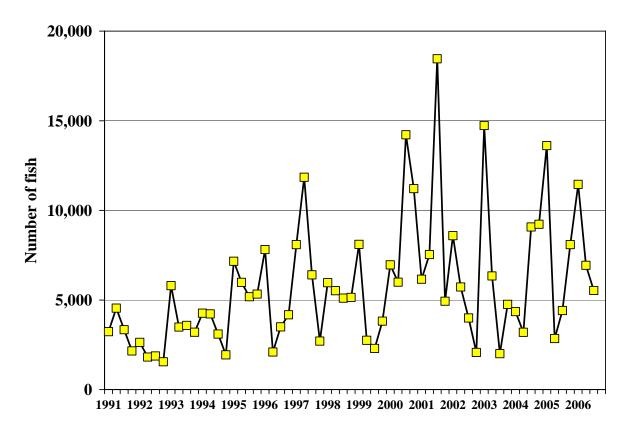


Figure 8.—Hawaii-based catch of yellowfin tuna by quarter, 1991-2006.

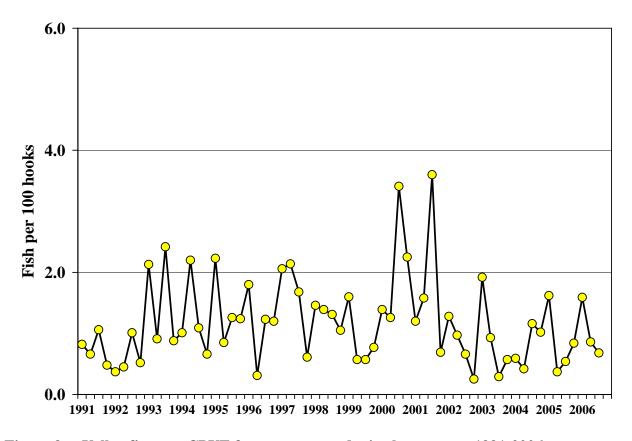


Figure 9.—Yellowfin tuna CPUE for tuna-targeted trips by quarter, 1991-2006.

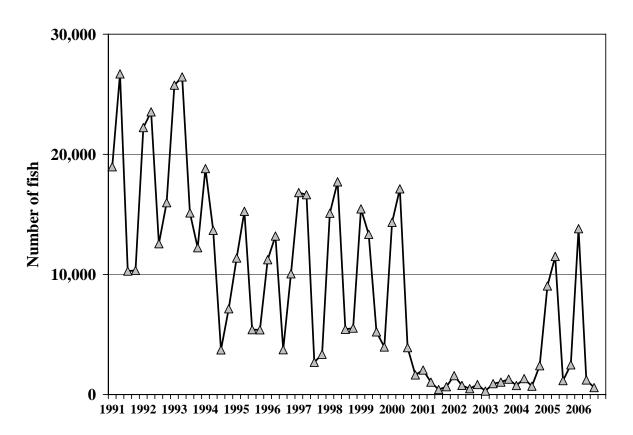


Figure 10.—Hawaii-based longline catch of swordfish by quarter, 1991-2006.

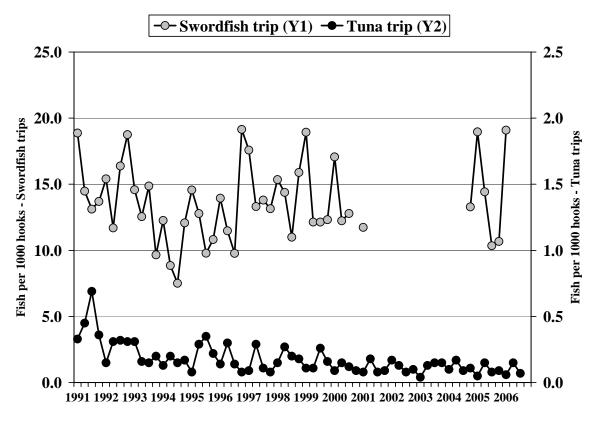


Figure 11.—Swordfish CPUE by quarter, 1991-2006.

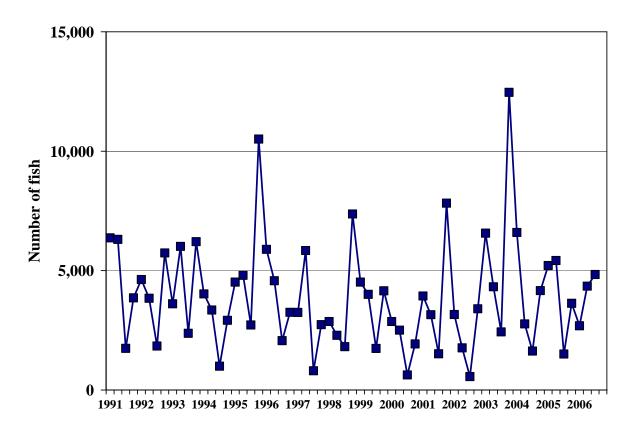


Figure 12.—Hawaii-based longline catch of striped marlin by quarter, 1991-2006.

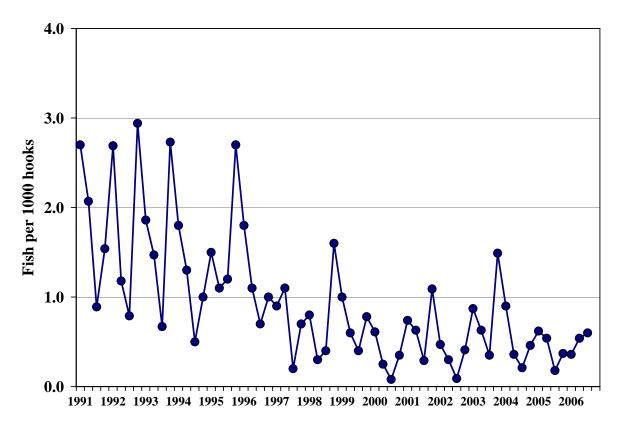


Figure 13.—Striped marlin CPUE for tuna-targeted trips by quarter, 1991-2006.

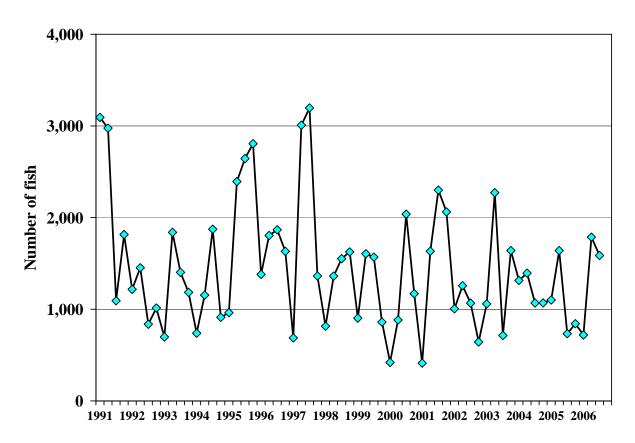


Figure 14.—Hawaii-based longline catch of blue marlin by quarter, 1991-2006.

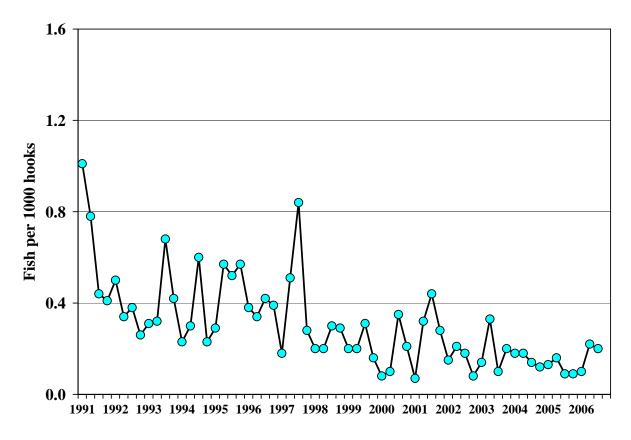


Figure 15.—Blue marlin CPUE for tuna-targeted trips by quarter, 1991-2006.

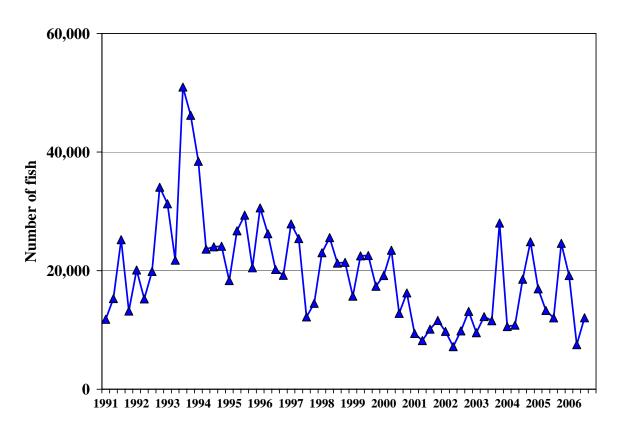


Figure 16.—Hawaii-based longline catch of blue shark by quarter, 1991-2006.

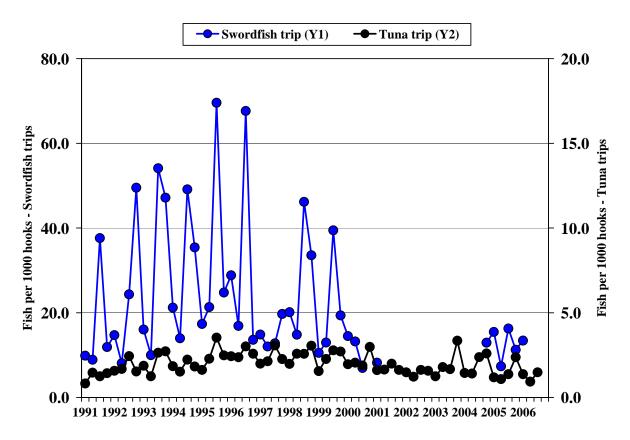


Figure 17.—Blue shark CPUE by quarter, 1991-2006.

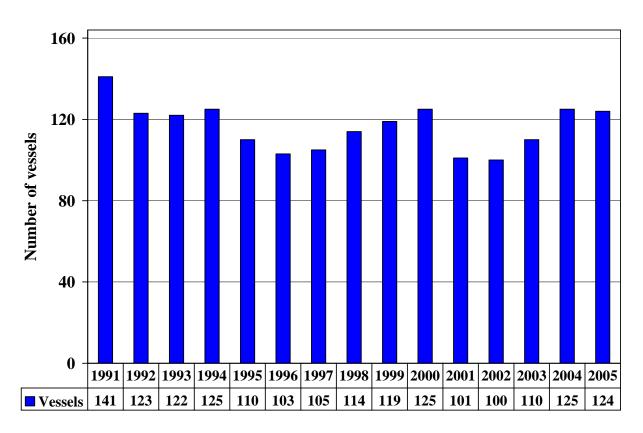


Figure A1.—Number of active Hawaii-based longline vessels, 1991-2005.

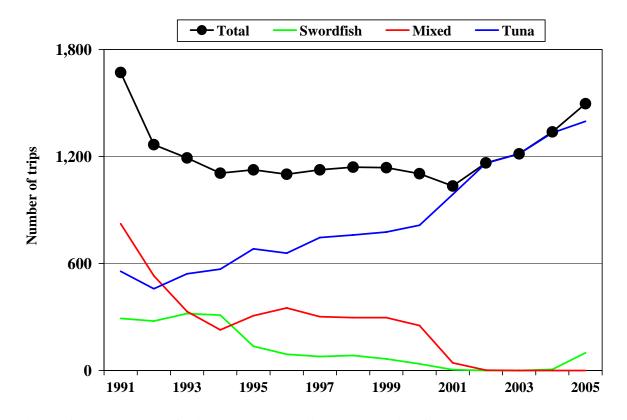


Figure A2.—Number of trips by the Hawaii-based longline fishery, 1991-2005.

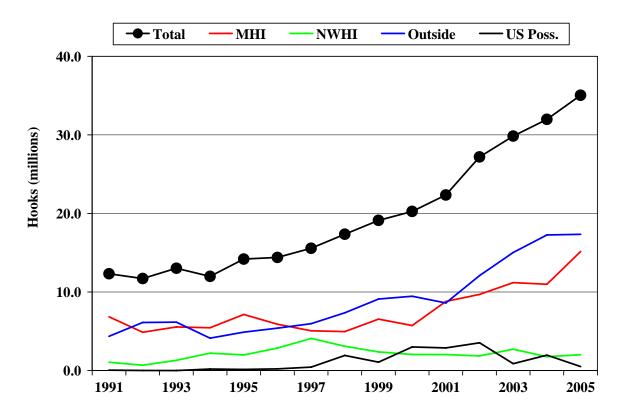


Figure A3.—Number of hooks set by area, 1991-2005.

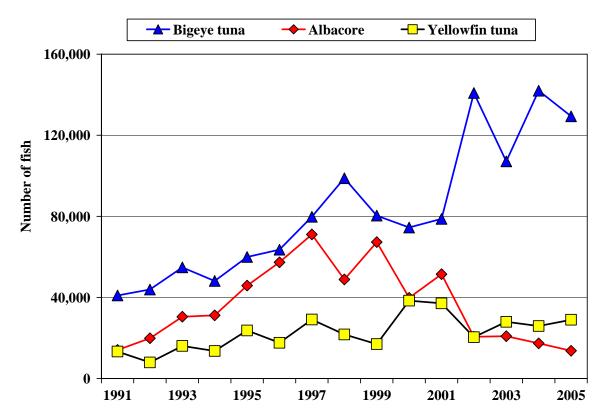


Figure A4.—Tuna catches by the Hawaii-based longline fishery, 1991-2005.

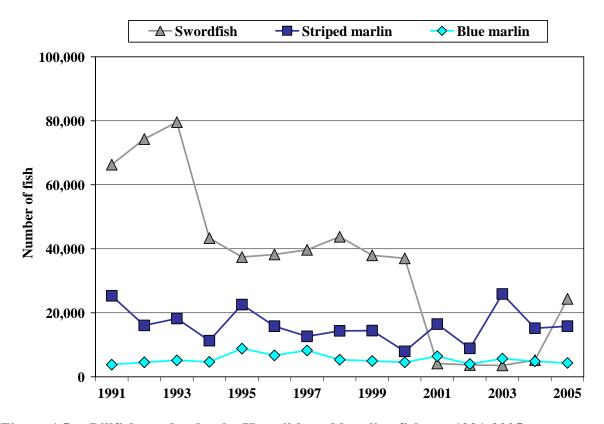


Figure A5.—Billfish catches by the Hawaii-based longline fishery, 1991-2005.

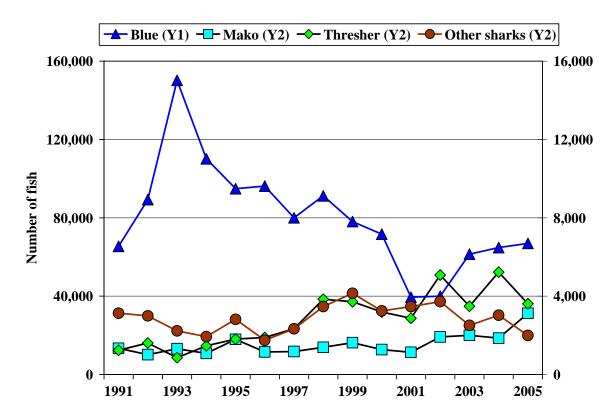


Figure A6.—Shark catches by the Hawaii-based longline fishery, 1991-2005.

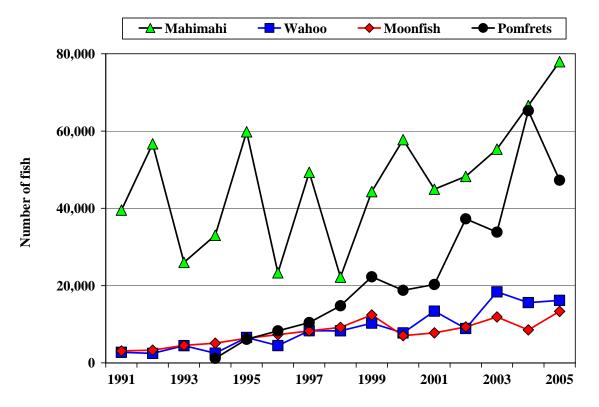


Figure A7.—Catches of miscellaneous pelagic species, 1991-2005.